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| APPLICATION NO.  | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------|-----------------------------------|----------------------|---------------------|------------------|
| 10/574,783       | 04/06/2006                        | Hideki Kitamura      | NISH.0001           | 2566             |
| Stanley P. Fishe | 7590 10/01/200<br>er              | EXAMINER             |                     |                  |
| REED SMITH LLP   |                                   |                      | NELSON, MICHAEL B   |                  |
| Falls Church, V  | Park Drive, Suite 1400<br>A 22042 |                      | ART UNIT            | PAPER NUMBER     |
| ,                |                                   |                      | 1794                |                  |
|                  |                                   |                      |                     |                  |
|                  |                                   |                      | MAIL DATE           | DELIVERY MODE    |
|                  |                                   |                      | 10/01/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)   |  |  |  |
|--|---|--|--|--|--|
|  | 10/574,783  | KITAMURA ET AL.  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |
|  | MICHAEL B. NELSON   | 1794   |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).   | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status   |   |  |  |  |  |
| 1) ☐ Responsive to communication(s) filed on 30 Ju 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This 3) ☐ Since this application is in condition for allowant closed in accordance with the practice under E  | action is non-final.<br>nce except for formal matters, pro  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |
| 4) ☐ Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) 14-19 is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-13 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ access Applicant may not request that any objection to the content of | n from consideration. r election requirement. r. epted or b) □ objected to by the I   |  |  |  |  |
| Replacement drawing sheet(s) including the correcti  | •   | •  |  |  |  |
| Priority under 35 U.S.C. § 119   | animor. Note the attached office  | 7.00.017.01.101111.1.10.102.   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  |   |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 02/07/2007.   | 4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:   | ate  |  |  |  |

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### **DETAILED ACTION**

### Election/Restrictions

1. Applicant's election of Group I, claims 1-13 in the reply filed on 06/30/08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

## Claim Objections

2. Claim 7 is objected to because of the following informalities: the unit "mg/100g" appears to be a typographical error of "ml/100g." See instant specification, page 16, lines 20-25.

Appropriate correction is required.

# Claim Rejections - 35 USC § 102/103

- 3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
  - A person shall be entitled to a patent unless –
  - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.

- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Regarding 102/103 rejections, when the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980) a 102/103 rejection can be made. See MPEP § \$ 2112-2112.02.
- 8. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated, or in the alternative are rejected under 35 U.S.C. 103(a) as being unpatentable over, Kitaura et al. (JP 07-085722), see Machine Translation (NPL document U).

Regarding claim 1, Kitaura et al. discloses a semiconductive film having a composition of 5-40 parts conductive filler to 100 parts polymer ([0008]), inter alia poly ether ether ketone, ([0007]). The conductive filler of Kitaura et al. is disclosed as being sold under the trade name "KETCHIEN black EC," which is believed to be the same as the instantly disclosed "Ketjen

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Black EC" (Example 1, Page 36). Kitaura et al. also discloses that the semiconductive film have a volume resistivity of between 10^11 and 10^12 ([0012], also see Japanese original for exponents), with a variation of 1-20 times the minimum value. The thickness is also disclosed as being 150 microns thick ([0012]). Regarding the consistency of the film's thickness, it would have been obvious to one having ordinary skill in the art to have maintained the most consistent thickness along the length of the film in order to minimize variation in the semiconductive properties of the belt. Regarding the "Folding Endurance," considering the substantially identical composition of the disclosed semiconductive resin with the instantly disclosed examples (i.e. Example 1, page 36-37), the semiconductive film of Kitaura et al. would exhibit the instant claimed properties.

Regarding claims 2-5, Kitaura et al. discloses all of the limitations as set forth above. Kitaura et al. does not disclose the particular instant claimed properties of claims 2-5, however, given the substantially identical composition of the disclosed semiconductive resin (i.e. PEEK to conductive filler ratio and type of conductive filler) as compared to the instantly disclosed examples (i.e. Example 1, page 36-37), the semiconductive film of Kitaura et al. would exhibit the instantly claimed properties.

Regarding claims 6-13, Kitaura et al. discloses all of the limitations as set forth above. Additionally, Kitaura et al. discloses that the conductive filler is carbon black and has a DBP in the range of 30-700 ml (i.e. B and A with DBP of 200-700 and 30-180 ml, [0004]). The carbon black used "KETCHIEN black EC," is believed to be the same as the instantly disclosed "Ketjen Black EC" (Example 1, Page 36) and is an acetylene or oil furnace black. Given the substantially similar type of carbon black (i.e. tradename and DBP ratio) the conductive filler of

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Kitaura et al. will exhibit the claimed volume resistivity and volatile matter content as instantly claimed. Kitaura et al. also discloses that the semiconductive film be used as a charge control member either as part of a tuber roller or a semiconductive belt ([0010]).

### Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL B. NELSON whose telephone number is (571) 270-3877. The examiner can normally be reached on Monday through Thursday 6AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MN/ 08/19/08

/Carol Chaney/ Supervisory Patent Examiner, Art Unit 1794